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AUTHOR Delaney, Anne Marie

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#### ABSTRACT

This study examined institutional researchers' perceptions regarding their effectiveness in influencing institutional policy changes, the factors that make institutional researchers effective in the policy arena, and researchers perspectives regarding job-related rewards; challenges encountered in seeking to establish influential roles in decision making; and strategies utilized for coping with these challenges. Data was based on a mailed survey sent to 304 institutional researchers in the Northeast; 221 responses were received. Chi-square analysis examined variations in perceived policy effectiveness by gender, current professional position, level of education, and type of institution. Correlation and t-tests were used to investigate relationships between perceived effectiveness in policy and job rewards, job challenges, leadership experience, desire for enhanced skills, and mentor experience. Discriminant analysis identified predictors of perceived effectiveness in policy. The study confirms results of previous research which indicate that level of education has a significant impact on policy effectiveness; institutional researchers with doctorates reported significantly more often that their work had achieved institutional changes in programs or policies. Institutional researchers who include policy recommendations with their reports; conduct follow-up studies on the impact of their work, and whose work is used in executive decision making perceive themselves to be more effective in influencing policy. (CH)



# Institutional Researchers as Leaders in Policy: Perspective and Possibilities

Anne Marie Delaney

Director of Institutional Research, Babson College

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Correspondence concerning this paper should be addressed to:

Anne Marie Delaney
Babson College
Academic Affairs - Horn Library 313
Wellesley, MA 02457-0310
(781) 239-6481

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Institutional Researchers as Leaders in Policy: Perspective and Possibilities

### **ABSTRACT**

This paper presents the results of a research study that investigated institutional researchers' perceptions regarding their effectiveness in influencing policy changes at their institution. Data were obtained from a mailed survey sent to 304 researchers in the Northeast; a response rate of 73 percent was achieved. Results revealed that those whose work is used in executive decision-making; who include policy recommendations in reports; conduct follow-up studies on the impact of their work; have a doctorate, are part of a strong, professional network; and describe their positions as challenging perceive themselves as more effective. The discriminant function including these variables explained 48 percent of the variance and accurately predicted the perceived policy effectiveness for 84 percent of the participants.



# Institutional Researchers as Leaders in Policy: Perspective and Possibilities Introduction

Purpose. This paper presents the results of a research study that investigated institutional researchers' perceptions regarding their leadership role in higher education planning and policy. The paper focuses primarily on institutional researchers' perceived effectiveness in influencing policy changes at their institution. The major research questions are:

- How effective are institutional researchers in influencing policy? and
- Answers to these questions offer insights that can be used to enhance the effectiveness of all practicing institutional researchers. The study also documents institutional researchers' perspectives regarding job-related rewards; challenges encountered in seeking to establish

influential roles in decision-making; and strategies utilized for coping with these challenges.

• What factors make institutional researchers more effective in the policy arena?

In the context of this study, effectiveness is based on participants' responses to the question, "Has your work effected program/policy changes at your institution?" Those who reported that their work 'often' or 'very frequently' effected program policy changes at their institution are classified as more effective, while those who reported that their work 'almost never', 'not often' or 'sometimes' effected program policy changes at their institution are classified as less effective.

Limitation of the Study. This research is a study of perceived effectiveness. Effectiveness is defined by respondents' views of their own effectiveness. These subjective perceptions may differ from other measures, such as supervisors' assessments. Future research might investigate the relationship between institutional researchers' judgments and their supervisors' evaluations with respect to policy effectiveness.



Review of the Literature. Researchers in the field of higher education recognize the significance of policy effectiveness for the institutional research profession. In their study of perceptions of effectiveness, Knight, Moore and Coperthwaite (1997) found that institutional researchers were more likely to consider themselves to be effective if they possessed the following characteristics: were employed in the field for a greater number of years; held the doctorate; were associate directors; and reported directly to the institution's president.

Sanford (1995) outlined four main challenges that institutional researchers need to address to ensure success in tomorrow's academic environment: adaptability to change, access to data with modern technology, better comparative data, and the policy analysis / technology resource dilemma. Keller (1995) contends that institutional researchers will need to work closely with administrators and provide information about trends, social changes and regional conditions. He claims that superior academic management will be more closely tied than ever to quality institutional research.

During the last decade, several researchers have recommended changes to ensure that institutional researchers will be effective in policy development. For example, Matier, Sidle, and Hurst (1994) advocate expanding the scope of institutional research to encompass the roles of information architect, change agent and consultant of choice within higher education institutions. Delaney (1997) recommends enhancing the capacity for conducting complex research studies; creating and supporting high-level audiences for institutional research studies; and expanding the focus of institutional research studies to include relevant factors and external trends. Lohmann (1998) proposes that institutional researchers become competent in policy debate; develop a power base; increase the level of environmental scanning; participate in the strategic planning process; and shift studies from mere reporting to timely research on pressing issues.



### Methodology

<u>Data Source</u>. Data for this study are based on results from a mailed survey sent to 304 institutional researchers in the Northeast; 221 returned completed surveys yielding a response rate of 73 percent. The respondent group reflects the demographic, educational and professional diversity of the institutional research profession. Of the 221 respondents, 41 percent are male and 59 percent are female; 40 percent possess a doctorate; 42 percent have a master's degree; and 18 percent hold a bachelor's degree. Respondents represent a range of professional positions. Eleven percent hold titles at the level of dean to vice-president; 50 percent are directors; 10 percent are associates; 16 percent are analysts, coordinators or mangers; and 13 percent are assistants or research and technical specialists.

Participants represent a range of experience in institutional research from less then one year to 28 years; the mean and median number of years are 9 and 8 respectively. With regard to type of institution, 33 percent have spent most of their career at a university, 28 percent at a four-year college, and 15 percent at a two-year college. The largest proportion, 29 percent have worked primarily at a public institution compared with 25 percent at a private, non-religious institution and 15 percent at a private religious institution.

Analytical Techniques. Data analyses involved both qualitative and quantitative techniques. The quantitative techniques included Chi-square, t-tests, correlation and discriminant function analyses. Chi-square analyses examined variation in perceived policy effectiveness by gender, current professional position, level of education and type of institution. Correlation and t-tests were utilized to investigate relationships between perceived effectiveness in policy and variation in job rewards, job challenges, leadership experience, desire for enhanced skills and mentor experience. Discriminant analysis identified predictors of perceived effectiveness in policy.



#### Results

Role in Policy. In describing their roles within the institutions, 47 percent of the institutional researchers in this study reported they 'often' or 'very frequently' serve on planning and policy committees. Approximately one-third or more 'often' or 'very frequently' present their work at executive level meetings; collaborate with others in program development and initiate discussions on program planning and policy. However, only 28 percent are 'often' or 'very frequently' consulted on impending policy changes, and only 12 percent 'often' or 'very frequently' conduct follow-up studies on the impact of their work.

With respect to the use and influence of their work, 86 and 72 percent respectively reported that their work 'often' or 'very frequently' is disseminated at the vice presidential and presidential levels and is used in executive decision-making. However, only 31 percent reported that their work 'often' or 'very frequently' includes policy recommendations. Finally, only 49 percent reported that their work 'often' or 'very frequently' has effected program/policy changes.

Correlation analyses were conducted to investigate the relationship between characteristics of institutional researchers, their practice and effectiveness in influencing policy. The two strongest correlates are: work is used in executive decision-making (r = .72, p  $\leq$  .001) and research reports include policy recommendations (r = .51,  $p \le .001$ ). Next in order, institutional researchers conduct follow-up studies on the impact of their work (r = .48, p  $\leq$  .001) and work is disseminated at the vice-presidential or presidential level (r = .48,  $p \le .001$ ). Also significant is the fact that more effective institutional researchers experience challenging leadership opportunities in their current position ( $r = .37, p \le .001$ ).

T-test analyses were also conducted to identify significant differences between more and less effective institutional researchers both in the roles they assume and in the use of their work



6.18\*\*\*

at their institution. These differences are displayed in Table 1. In terms of roles, more effective institutional researches are more frequently consulted on impending policy changes; present their work at executive meetings; and conduct follow-up studies on the impact of their work. In addition, their work more frequently includes policy recommendations and is more frequently disseminated and used at executive levels within the institution.

Table 1 Significant Differences in Roles Assumed by More and Less **Effective Institutional Researchers** 

Means

4.14

.66

\*\*\*  $p \le .001$ 

#### More Difference t Ratio Role Less 3.36 2.44 .92 5.94\*\*\* Are consulted on policy changes 5.12\*\*\* Present work at executive meetings 3.53 2.66 .87 2.00 .85 6.18\*\*\* Conduct follow-up studies 2.85 Collaborate in program development 3.37 2.60 .77 5.20\*\*\* Serve on planning and policy committees 3.87 3.10 .77 4.48\*\*\* .72 4.31\*\*\* Initiate discussion on planning and policy 3.10 2.38 Use of Work 12.08\*\*\* Work used in executive decisions 4.64 3.51 1.13 1.03 6.85\*\*\* Work includes policy recommendations 3.44 2.41

4.80

Chi-square analyses examined the relationships between institutional researchers' personal and professional characteristics and their effectiveness in policy. Variables examined include gender, level of education, current position, and type of institution in which they have spent most of their career. Results revealed only one significant relationship - between level of education and effectiveness in policy ( $X^2 = 6.40$ , p < .05). Researchers with more education were more

Work disseminated at executive level

Note. Response scale: 1 "almost never" to 5 "very frequently"



effective in influencing program/policy changes. Some 58 percent of those with a doctorate, compared with 47 percent of the master's degree and 34 percent of the bachelor's degree respondents reported their work 'often' or 'very frequently' has effected program/policy changes.

Rewarding Aspects of Work. In addition to focusing on effectiveness in policy, the study also explored institutional researchers' perspectives on the rewards and challenges they experience in their work. Results from this phase of the study identify professional independence in conducting research as one of the most rewarding aspects of an institutional researcher's job. Ninety-four and 88 percent respectively report they 'often' or 'very frequently' are able to work on their own and have the freedom to decide how to do their work. Between 60 and 81 percent 'often' or 'very frequently' are able to make decisions on their own; have the flexibility to set their own work priorities, and have the authority needed to get the job done.

Results indicate that work rewards associated with independence differ significantly between more and less effective institutional researchers. As shown in Table 2, more effective institutional researchers have more independent authority to hire persons of their own choice,

Table 2 Job Rewards of More and Less Effective Institutional Researchers

Means

	Mealis			
Job Rewards	More	Less	Difference	t Ratio
Independent authority to hire	3.20	2.36	.84	3.90***
Authority to spend budget	3.71	3.21	.50	2.40*
Authority to get the job done	4.20	3.79	.41	3.47***
Authority to set research agenda	3.75	3.36	.39	2.56**
Can reject superior's suggestions	3.18	2.80	.38	2.87**
Budget for professional development	3.91	3.54	.37	2.38*
Being able to work on one's own	4.67	4.45	.22	2.63**

Note. Response scale: 1 "almost never" to 5 "very frequently" \*  $p \le .05$ ; \* \*  $p \le .01$ ; \*\*\*  $p \le .001$ 



to spend their budget, to set their research agenda, and to do what is necessary to get the job done. They also have more freedom to work on their own, to accept or reject superior's suggestions, and they receive more financial support for professional development.

Leadership Experience. Since leadership qualities influence the extent to which individuals can effect change, this study also explored institutional researchers' potential, preparation and perceived support for their leadership role. Participants were asked to rate themselves, their education, professional associations, and the support they received with respect to developing their leadership role. Some 30 and 21 percent respectively rated themselves 'excellent' in terms of their leadership potential and effectiveness as a leader when given the opportunity. With regard to support for their leadership role, 'excellent' ratings ranged from 21 to 30 percent respectively for the support received from male superiors and from female subordinates. Only 19 percent reported 'excellent' ratings for leadership opportunities in their current position. Even fewer, 13 percent, gave 'excellent' ratings for leadership development through professional associations.

As illustrated in Table 3, more and less effective institutional researchers differ significantly on four leadership variables. In terms of self-ratings, more effective institutional researchers report higher ratings for their own potential as leaders and for their effectiveness as leaders when given the opportunity. Further, more effective institutional researchers rate their current position higher in terms of leadership opportunities and they offer higher ratings for the support received for their leadership role from male subordinates. These findings document the important relationship between leadership and perceived policy effectiveness and suggest that efforts to develop institutional researchers' leadership potential may result in greater policy effectiveness.



Table 3 Differences in Leadership Potential and Experience of **More and Less Effective Institutional Researchers** 

Means			
More	Less	Difference	t Ratio
3.76	3.36	.40	2.72**
4.23	3.85	.38	3.56***
4.03	3.70	.33	2.12*
4.23	3.96	.27	3.43***
5 "excellent"	* p $\leq$ .05;	$**p \le .01; ***p$	<u>≤</u> .001
	3.76 4.23 4.03 4.23	More     Less       3.76     3.36       4.23     3.85       4.03     3.70       4.23     3.96	More         Less         Difference           3.76         3.36         .40           4.23         3.85         .38           4.03         3.70         .33

Participants in this study also offered their opinions regarding the most important qualities a person needs to be an effective leader. As reflected in the following comments, they referred to qualities of character and personality, the capacity for vision, and competence in relevant skills. In their words, effective leaders possess the following traits:

# **Qualities of Character**

- trustworthy, honest, able to communicate and see a vision/grand plan;
- have integrity, compassion, a strong intellect and a willingness to listen;
- have the courage to stand by convictions, modeling good management; and
- possess integrity, character, . . . the ability to stand alone if necessary, and the ability to communicate intellectually and emotionally with others;

## **Personality Traits**

- knowledge, empathy, confidence that can be projected outward;
- intelligence, the ability to listen, care about people, and the capacity for hard work;
- wisdom, experience, interest in others;



- the ability to understand both sides of an issue and show fairness; and
- a sense of humor, vision, intelligence, and the capacity to see the big picture;

# **Capacity for Vision**

- the ability to see a distance ahead, set goals, and establish steps to reach these goals;
- a vision of the organization they want to create and some idea of how to achieve it;
- a combination of vision and strong management sense and the ability to motivate others;
- a "vision" for goals to be achieved, . . . and the ability to connect with others to bring their thoughts, creativity, and energy to this process;

#### Skills

- ability to listen and to understand what others expect and read between the lines;
- mastery of the skills needed for the position, ability to plan, flexibility, and self-confidence;
- must be in tune with others, able to listen and share information, able to organize, delegate, and effectively hold staff meetings;
- excellent listening skills, drawing on each person's strengths to add to the teams' efforts;
- the ability to hire staff with complementary skills, encourage growth and development, protect when necessary, support when protection is not possible;
- a dual emphasis on the task and the people doing it initiating structure and showing consideration - collaborative teamwork; and
- substantive competence in his or her profession, interpersonal skills, high ethical standards, a participatory management style, trustworthiness, and creativity.



Challenging Professional Opportunities. When asked to what extent their current position provides challenging opportunities in various areas, 60 percent of the study participants reported 'very much' for computer technology, followed by 41 percent for intellectual reasoning, 33 percent for research design and statistical analysis and 27 percent for higher education policy. In contrast, only 20 percent or fewer reported that their current position offered 'very much' of a challenge in the areas of leadership, management and training opportunities in research.

Comparative analyses identified statistically significant differences between more and less effective institutional researchers in the extent to which they experienced various challenging opportunities in their current position. These differences are documented in Table 4. As shown, more effective institutional researchers report more challenging opportunities in leadership, higher education policy, and management, as well as in intellectual reasoning, research design and statistical analysis.

Table 4 Significant Differences in Challenging Opportunities of More and Less Effective Institutional Research

Challenging Opportunity	More	Less	Difference	t Ratio
Leadership	3.75	3.13	.62	4.36***
Higher education policy	3.97	3.42	.55	3.76***
Management	3.81	3.28	.53	3.75***
Research design	3.99	3.57	.42	2.80**
Statistical analysis	4.02	3.67	.35	2.42*
Intellectual reasoning	4.34	4.01	.33	2.97**
Training opportunities in research	3.16	2.83	.33	2.02*
Note. Response scale: 1 "not at all" to 5	"very much"	* p $\leq$ .05;	$**p \leq .01; ***$	p <u>&lt;</u> .001



Interest in Skill Development. When asked to identify the skills they would like to develop, 56 and 48 percent respectively expressed interest in developing their statistical and technological skills. Next in order, 38 percent expressed an interest in enhancing their leadership skills and 37 reported an interest in developing their skills in each of the following areas: analysis, budget and research knowledge.

Chi-square analyses identified a statistically significant difference between more and less effective institutional researchers in terms of one skill enhancement area - analytical skills. A higher 60 percent of the less effective, compared with only 40 percent of the more effective, institutional researchers expressed an interest in developing analytical skills (X2 = 4.20,  $p \le .05$ ).

Resources and Strategies for Success. The study also explored what resources and strategies institutional researchers use to overcome obstacles and achieve professional success. The vast majority, 78 percent, reported they have had a mentor. Sixty-six percent have sought other professionals in similar positions to advise them, and 59 percent have a strong professional network. The majority reported that their mentors 'frequently' or 'almost always' engaged in the following activities: communicating - listening and responding; motivating and encouraging growth; advising on substantive work issues; role modeling, and validating. No statistically significant differences were found between policy effectiveness and the role of mentors.

Statistically significant differences were found between policy effectiveness and researchers' initiative in seeking out other professionals to advise them ( $X^2 = 8.23$ , p  $\leq .05$ ) and involvement in a strong network of other professionals ( $X^2 = 8.47$ , p < .05). Sixty-eight percent of the more effective, compared with only 53 percent of the less effective institutional researchers, report they sought both male and female professionals to advise them. Similarly, 67 percent of the more effective, compared with only 49 percent of the less effective institutional researchers,



reported that they were part of a strong network of female and male professionals. These results indicate that more effective institutional researchers reach out to and rely on a network of support from both male and female colleagues.

Predictors of Policy Effectiveness. Discriminant analysis was employed to determine which combination of variables would predict institutional researchers' effectiveness in influencing policy. Table 5 displays the results from this analysis. The discriminant function coefficients indicate the relative weights for each variable found to be a significant predictor of effectiveness.

Table 5 **Discriminant Analysis Results: Predicting Policy Effectiveness in Institutional Research** 

Predictors	Standardized Discriminant Function Coefficients	Percent Correctly Classified
Work used in executive decision-making	.85	84%
Conduct follow-up studies on impact of work	.22	2 3 7 6
Seek other professionals to advise	.14	
Hold a challenging professional position	.14	
Attain a high level of education	.10	
Work includes policy recommendations	.10	
Are part of a strong professional network	.02	
Canonical Correlation	.69	

 $X^2 = 127.98$ ; 7 df; p < .001

As shown in Table 5, the strongest predictor of policy effectiveness is that work is used in executive decision-making. Next in order are specific behaviors of institutional researchers including conducting follow-up studies on the impact of the work; seeking out other professionals for advice; and holding a challenging professional position. In this analysis, challenging professional position is based on a mean response to the question, "To what extent does your



current position provide challenging opportunities in intellectual reasoning, leadership and management?" Including policy recommendations in one's work, attaining a high level of education, and being part of a strong network of professionals are also significant predictors of policy effectiveness.

These results indicate that institutional researchers who are able to introduce their work into executive decision-making and who take a pro-active role with respect to their own work are likely to be more successful in influencing program and policy changes. This pro-active role includes formulating policy recommendations based on research findings and conducting followup studies to determine if the research had any impact. Other academic and social factors also make a difference. Researchers who hold a doctorate and those who seek advice and support from other professionals are also more effective in influencing planning and policy.

The discriminant function including these seven variables accurately predicted the policy effectiveness of 84 percent of the respondents. The canonical correlation of .69 indicates that this function explains 48 percent of the variance in institutional researchers' effectiveness in influencing program and policy changes at their institution.

#### Discussion

Results from this research identify qualities of institutional researchers, characteristics of their positions, and specific professional behaviors significantly related to accomplishing institutional program and policy changes based on research. These results provide a framework for developing strategies to further enhance the policy role of individual institutional researchers and the institutional research profession.

This study confirms results from previous research that level of education has a significant impact on policy effectiveness. Bivariate and multivariate analyses revealed that institutional



researchers with a doctorate reported significantly more often that their work had resulted in program or policy changes at their institution. Previously, Knight, Moore and Coperthwaite (1997) also discovered that institutional researchers with a doctorate were more likely to consider themselves to be effective. Delaney (1997) found the presence of an institutional research director with a doctorate to be significantly related to involvement in planning and policy development.

Findings from this study also revealed an interesting insight with regard to the relationship between policy effectiveness and how institutional researchers conduct their professional lives and their work. Institutional researchers who seek other professionals to advise them and who are part of a strong professional network report significantly more often that their work has achieved program and policy changes at their institution.

Finally, this study identified three professional behaviors significantly related to policy effectiveness. The first and strongest is that work is used in executive decision-making. This requires collaboration between the institutional researcher and the decision-makers. The other two behaviors are within the discretion of the institutional researcher - including policy recommendations in research reports and conducting follow-up studies on the impact of research studies.

The identification of these behavioral predictors of policy effectiveness supports the findings and recommendations of several previous researchers. Keller (1995) recommended that institutional researchers work more closely with administrators to realize successful management in tomorrow's academic environment. Matier, Sidle and Hurst (1994) advocated that institutional researchers become information architects, change agents and consultants of choice with higher education institutions. Lohmann (1998) proposed that institutional researchers become



competent in policy debate, participate in the strategic planning process, and shift studies from mere reporting to timely research on critical issues. Results from this study support the validity of each of these recommendations and confirm their relevance to effectiveness in program planning and policy.

#### Conclusion

Findings from this study identify strategies for enriching institutional researchers' perspectives on their positions and enhancing the possibilities for success in influencing policy. Results show that institutional researchers who include policy recommendations in their reports; conduct follow-up studies on the impact of their work and whose work is used in executive decision-making perceive themselves to be more effective in influencing policy. Having a doctorate and being part of a strong network of other professionals also enhance perceived policy effectiveness. Further, institutional researchers who experience success in the policy arena find their positions challenging. These results suggest possible objectives and strategies that aspiring institutional researchers and professional associations may pursue to ensure that institutional researchers become influential leaders in policy development.

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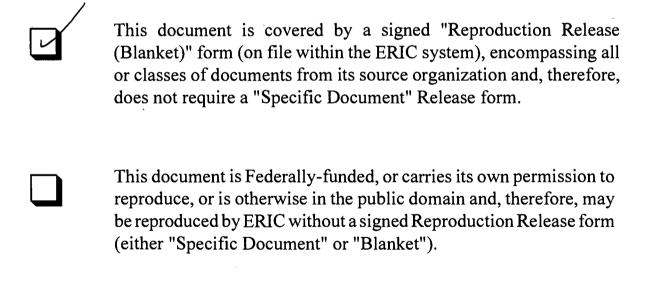
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